Appendix B – MacDill Air Force Base Interview Summaries

<u>List of Interviewed Personnel -MacDill Air Force Base</u>

Bryan Langhorne (BL)

GIS/CADD System Manager

MacDill - CECP

Ph: 1-(813)-828-4403

langhorb@ces6.macdill.af.mil

Joeseph Hunter (JH)

IRP Chief

MacDill - CEVC

Ph: 1-(813)-828-2567

Bob Hoffman (BH)

Cultural Resource Specialist

MacDill - CEVC

Ph: 1-(813)-828-2567

Andrew W. Rider (AWR)

Chief of Compliance

MacDill - CEVC

Ph: 1-(813)-828-2567

Shelly Urbinek (SU)

Cultural Resource Specialist

MacDill - CEVC

Ph: 1-(813)-828-2567

William Herr (WH)

Environmental Engineer - Lead Paint

MacDill - CEVC

Ph: 1-(813)-828-2567

Richard Burnett (RB)

Environmental Engineer - Tanks

MacDill - CEVC

Ph: 1-(813)-828-2567

Capt. Jalowski (CJ)

Environmental Engineer - Wastewater

MacDill - CEVC

Ph: 1-(813)-828-2567

Michael Bowers (MB)

Environmental Engineer - Haz. Waste

MacDill - CEVC

Ph: 1-(813)-828-2567

Robert Medira (RM)

MacDill - SE

Ph: 1-(813)-828-3383

TSgt. St. Jean (TSSJ)

Environmental Engineer - Haz. Materials

MacDill - HazMART Pharmacy (HMP)

Ph: 1-(813)-828-2582

Gene Fullen (GF)

Resources Manager

MacDill - CERW

Roy Kerns

Environmental Engineer - Air/Asbestos

MacDill - CEVC

Ph: 1-(813)-828-2567

James C. Campbell P.E.

Deputy Base Civil Engineer

MacDill AFB

Ph: (813) 828-3577

David Hansen

Chief of Engineering

MacDill AFB

Ph: (813) 828-4469

William Cawood

Chief of Planning and Programs

MacDill AFB

Ph: (813) 828-4709

General Systems - Environmental

Contact: Bryan Langhorne

CADD/GIS Coordinator

MacDill - 6CES Ph: (813)-828-5390

Date of Interview: Tuesday June 24, 1997

- **Q** What type of operating platform(s) support your current CAD/GIS applications technology?
 - A Currently, they are trying to convert from AutoCAD to MicroStation (MGE-Voxel). Have all the MicroStation hardware in place and operational, but very few have used it to date. People are comfortable with AutoCAD so converting them may be slow and both systems will have to be supported for some time. There is a single LAN which supports the base.
- **Q** What type of network operating system(s) is currently being used to facilitate the computers/CAD workstations at this facility?
 - **A** Most of MacDill's computers are on a Local Area Network (LAN). Working on connections to ERPMS and EMIS, but not in place yet.
- **Q** What kind(s) of computers are currently being used at this site for CAD/GIS, in terms of CPU size capabilities? Also indicate how many of each.
 - A 386s. 486s, Pentiums. Not sure how many of each.
- **Q** Do the computers at this facility have the capability to access the internet?
 - **A** Yes. Most do. Most people know how to use it relatively confidently.
- **Q** How is it decided what type of hardware/software is purchased and when?
 - **A** *Included in annual budget estimate.*
- **Q** What type of procedures and or processes are currently being used at this site to maintain a valid electronic file backup, briefly describe?
 - A No comment.
- **Q** Do you have an off-site storage procedure or program in place for electronic file backups?
 - A No comment.
- **Q** What primary CAD/GIS application software(s) are currently being utilized at this facility?
 - A Intergraph MGE. Some ArcView. Getting away from AutoCAD, but still used by many. Intergraph stations purchased and up and running, not used much yet.

- **Q** What add-on CAD/GIS application software(s) are currently being utilized at this facility and which corresponding primary CAD application software(s) support them?
 - A No comment.
- **Q** What types of database software are currently being used at this facility, and in what capacity?
 - A No comment.
- **Q** Do you currently use the internet as a vehicle for data exchange, or plan to do so?
 - A No comment.
- **Q** Do you have any system related remarks and or concerns that you would like to comment on?
 - A No comment.

TSSDS Familiarity - Exposure

Contact: Mr. Bryan Langhorne

CADD/GIS Manager

MacDill AFB Ph: (813) 828-4403

Date of Interview: Wednesday, June 25, 1997

Q Have you ever been exposed to the Tri-Service Spatial Data Standards (TSSDS) for GIS or the A/E/C CADD Standards?

A *Yes, both sets of standards.*

If no:

Are you interested in receiving information on Tri-Service Standards? Yes / No

If yes:

Q Do you or does your office have a copy of the standard? Yes / No

A Yes. There are copies of both the Tri-Service Spatial Data Standards (TSSDS) for GIS and the A/E/C CADD Standards, in hard copy and electronic format.

If no:

Would you like to receive a CD-ROM copy of the TSSDS Yes / No and A/E/C CADD Standards?

- Q Have you or anyone working in the area of AEC and GIS at your facility ever used the current versions of these standards? Yes/No
 - **A** Yes, in-house staff personnel working with CADD/GIS applications are obligated to use the standards.

If yes: Continue to next question

- Q Of those working on CADD/GIS projects related to base activities, which group is the most familiar with the TSSDS and the AEC standards.
 - **A** The CADD personnel who are currently involved with the installation of the GIS.
- **Q** Approximately how many times have you utilized the Tri-Service Standards?
 - **A** The standards are used on a daily basis, whenever changes are made to CADD/GIS program applications.

- **Q** What have been your general impressions of the Tri-Service Standards? (TSSDS and AEC)?
 - **A** For the most part the GIS spatial data standards are very complete, we would like to see data standards developed for the AEC.
- Q How would you rate the level of difficulty involved in understanding and using the Tri-Service Standards? (TSSDS and AEC)?
 - **A** The Tri-Service Spatial Data Standards were difficult to learn and understand, however with each new release the standards are becoming easier to understand and use.
- Q What aspects of the Tri-Service Standards programs if any have you had troubles with? Explain. (TSSDS and AEC)
 - **A** We had difficulty using the print functions and search capabilities.
- Q Do you have specific suggestions on how to improve these characteristics of the Tri-Service Standards programs? (TSSDS and AEC)
 - **A** The search capabilities need better definition; ability to print individual sheets; the data structure needs to be tied together better.
- **Q** Would you be willing to provide additional specific feedback to the Tri-Service Technology Center regarding these issues?
 - **A** Yes. Any opportunity that would serve to improve the standards would be quite beneficial to the evolution of the software and our GIS.
- **Q** Based on your experience with the Tri-Service Standards programs, are there areas which require additional coverage.
 - A Within the Tri-Service Facility Management Standards (TSFMS) additional coverage should be developed to include data standards for many of the AEC components and a method to generate work order criteria based on the standards data.
- Q Did the personnel using the Tri-Service Standards teach themselves or learn by another method?
 - A They were self taught. The whole process was a little cumbersome, it could be easier.
- **Q** Based on your experience with the Tri-Service Standards, which of the following would help the most to ensure that the standards are more uniformly implemented at your facility?: (please rank selections)
 - 1.) A training program for GIS specialists
 - 2.) Examples of Tri-Service Standard compliant projects similar to in-house applications
 - 3.) An implementation manual which conceptually steps an information system specialist through the setup of a new Tri-Service Standard compliant application and a conversion process of an existing non-compliant application to Tri-Service Standards compliant
 - 4.) Other:

- A No. 3 Ranked first as the best method.
 - No. 1 Ranked second as the next best method.
 - No. 2 Ranked third as the next best method.
 - No. 4 No comment.

TSSDS Familiarity - Project

Contact: Mr. Bryan Langhorne

CADD/GIS Manager

MacDill AFB Ph: (813) 828-4403

Date of Interview: Wednesday, June 25, 1997

- Q Has an attempt been made to implement any form of the Tri-Service Standards into a current application use?
 - **A** *Yes, the GIS at MacDill has implemented the TSSDS totally across the board.*
- **Q** Does any portion of a current database schema comply with the Tri-Service Standards data structures? Please explain.
 - **A** *Yes, The MacDill GIS database is compliant with Tri-Service Standards.*
- Q Likewise, do any of the graphical entities for a current application comply with applicable Tri-Service Standards graphical entities? Please explain.
 - **A** The graphical entities that are contained within the MacDill GIS are compliant with Tri-Service Standards.
- **Q** Are there plans to make current database schema Tri-Service Standards compliant?
 - **A** The current installation GIS database schema is Tri-Service Standards compliant.
- **Q** Are there plans to make current graphical entities Tri-Service Standards compliant?
 - **A** The current installation GIS is Tri-Service Standards compliant in terms of graphical entities.

Air Emissions/Air Quality Permits and Compliance

Contact: Mr. Roy Kerns - Environmental Engineer - Air

MacDill - CES

Ph: 1-(813)-828-2567

Date of Interview: (*Telephone interview to be conducted*)

General

Q What federal or state programs drive air quality issues at this facility? How are these emissions regulated (individually, facility bubble, regional bubble)?

A

Q What types of permitted air emissions sources are associated with this facility?

A

Data Management Systems

Q What types of management systems are currently being used relating to air quality compliance?

A

Q Are emissions estimates associated with any permitted sources? Would it be beneficial to manage that information similarly to monitoring (compliance assurance) data?

A

What is the method of data management/record keeping (paper copies, electronic copies, both)? How long are records kept? How long are they required to be kept?

 \boldsymbol{A}

Q What places are paper copies filed? Electronic copies kept? Do you believe that this is an effective management system for the intended purpose?

 \boldsymbol{A}

Monitoring and Reporting

Q How are air samples collected? By whom? Is any of the data collected via continuous means (e.g., flow rate)?

Q Is there a Sampling and Analysis Plan for air emissions? Would it be beneficial to access this information via a GIS?

A

Q What is the frequency of reporting? With what agencies are reports filed?

A

Violations

Q Have there been compliance problem in general or at any specific sources? Explain what enforcement actions have been implemented (NOV, Administrative Orders, Civil Penalties, Public Citizen Enforcement actions)? Would it be beneficial to manage this type of information via a GIS?

A

Q What are violation reporting requirements (time frame, resampling, reporting)?

A

Q How are violations to be handled? Is this procedure documented?

A

Regional Attainment

- **Q** Are there regional air quality monitoring points on site (e.g., for ozone attainment)?
 - **A** *CEVC-(AWR):* Regional attainment is an issue that MacDill has to deal with, although there are no monitoring points on base. When ozone levels are high, the base is required to provide additional controls and to try to pinch out potential ozone generating sources.
 - A CES-(RK):

Visions

Q What changes would you like to see implemented in the management of air permitting and compliance information? State systems applications and comment on changes.

Surface Water Discharge (NPDES) Permits and Compliance

(Industrial, Domestic, Storm Water, and Miscellaneous Discharges)

Contact(s): Mr. Andrew W. Rider - Chief of Compliance

Capt. Jalowski- Environmental Engineer (Watewater)

MacDill - CEVC Ph: 1-(813)-828-2567

Date of Interview: July 1, 1997

(Unavailable at time of site visit. Telephone interview not yet conducted.)

General

Q Are surface water discharges regulated under a federal or state program?

A

Q List the types of sources of wastewater effluents to surface water from this facility.

A

Q How are these discharges regulated (individually by outfall, internal monitoring points)?

A

Q Is (are) there on-site treatment plant(s) for waste waters - what type of data collection and management activities take place at these facilities? Would it be beneficial to manage this information via a GIS?

A

- Q Are there any unusual ways of disposing or reusing wastewater (land apply, deep well inject, evaporate, etc.)?
 - **A** CEVC-(AWR): Yes. Because of the bases proximity to Tampa Bay, no treated wastewater is NPDES discharged. Treated wastewater land applied via distribution through a network which allows it to be used to water two (2) golf courses maintained by MacDill or three (3) sprayfields.

Data Management Systems

- **Q** What types of management systems are currently being used relating to wastewater and stormwater compliance?
 - **A** CEVC-(AWR): Mostly hard copy records. Very little recordkeeping is done electronically. No electronic submittals to Florida DEP.

What is the method of data management/recordkeeping (paper copies, electronic copies, both)? How long are records kept? How long are they required to be kept?

A

Q What places are paper copies filed? Electronic copies kept? Do you believe that this is an effective management system for the intended purpose?

A

Monitoring and Reporting

Q How are wastewater/stormwater effluent samples collected? By whom? Is any of the data collected via continuous means (e.g., flow rate)?

A

Q Is there a Sampling and Analysis Plan for wastewater effluents? Would it be beneficial to access this information via a GIS?

A

Q What is the frequency of reporting? With what agencies are reports filed?

A

Violations

Q Have there been compliance problem in general or at any specific sources? Explain what enforcement actions have been implemented (NOV, Administrative Orders, Civil Penalties, Public Citizen Enforcement actions)? How are violations to be handled? Is this procedure documented? Would it be beneficial to manage this type of information via a GIS?

A

Visions

- **Q** What changes would you like to see implemented in the management of wastewater information? State systems applications and comment on changes.
 - A CEVC-(AWR): Wastewater is generally the biggest headache they have, more so from a functioning standpoint than a compliance standpoint. It would be beneficial to be able to access "real time" information (daily monitoring records) electronically from each of the treatment facilities concerning such things as flow, dissolved oxygen content, BOD, COD, and residual chlorine levels so that they could better anticipate problem conditions.

Building Environmental Hazards - Asbestos

(Environmental -CEVC)

Contact: Mr. Roy Kerns

Environmental Engineer - Asbestos

MacDill AFB Ph: (813) 828-2567

Date of Interview: July 18, 1997 (*Telephone interview.*)

- Q Has an asbestos survey been done for this facility? Were asbestos or asbestos related materials found to be present at this facility?
 - **A** Yes, an asbestos survey was completed in 1994. Decidedly the survey was considered inadequate and incorrect. The survey is used as a guideline only. The survey only covered family housing and noted high risk areas.
- **Q** What types of asbestos sources are present?
 - A Sources present are basically thermal insulation and building materials which consist of over 20,000 different product, and also some concrete products.
- **Q** Are locations of asbestos tracked by any means other than the survey?
 - A No. Other than results of survey information kept in hard copy format (written), actual locations are not defined anywhere else. We need an electronic tracking system put in place to be current and consistent with conditions and status of materials. We are currently updating records from continuous sampling and testing activities.
- Have asbestos remediation activities taken place at this facility within the past 10 years?
 - A Yes. Renovation and demolition drive abatement and maintenance activities. MacDill contracts out all remediation applications. Encapsulation is the preferred method of remediation.
- Q How are asbestos materials stored on-site? What records are available? What do these records contain?
 - A Contaminated asbestos containing materials are not allowed to be stored onsite for any extended periods of time. Interim permits are issued for temporary storage of materials for short durations of time.
- **Q** What disposal facilities were used? What testing did they require?
 - **A** Contaminated materials are disposed of by the contractors hired for abatement, manifests are required for submission to MacDill.

- **Q** Has NESHAP come into play (e.g., when buildings containing asbestos are torn down)?
 - A No. NESHAP compliance is not a factor in dealing with remediation activities, all abatement actions follow very strict guidelines..
- Q Is information managed or coordinated by any means? Would it be beneficial to use a GIS to manage this information?
 - **A** Currently all asbestos management activities are done manually. GIS would be a great solution. Currently we have three people and vast amounts of hard copy records to sort through.

Building Environmental Hazards - Lead Paint

(Environmental - CEVC)

Contact: Mr. Bill Herr

Environmental Engineer - Lead Paint

MacDill - CEVC Ph: 1-(813)-828-2567

Date of Interview: Tuesday, July 1, 1997

- Q Has a lead paint survey been done for this facility? Was lead paint found to be present at this facility?
 - A Lead paint issues have been covered under a number of different surveys. There is no single base-wide survey. These surveys have shown that both lead paint and asbestos are extensive problems at MacDill. Lead surveys have not been well coordinated to date and the hap-hazard nature of filing often results in resurveying of portions of the base at considerable expense.
- **Q** What types of facilities might have lead paint problems?
 - A Housing units, recreational facilities, operating facilities, etc. Just about everything has or has had a lead paint problem in the past. Living quarters needed for airmen and/or their families are generally targeted for remediation first; vacant buildings are at the bottom of the priority list because of low risk.
- **Q** Are locations of lead paint sources tracked by any means other than the survey?
 - A Large portions of these surveys are kept on are kept on the DOS based PVC3 system, which is nearly impossible to access anymore and contains numerous errors and bugs. The PVC3 system is used for asbestos information management also. No GIS capability associated with lead paint management.
- Q Have lead paint remediation activities taken place at this facility within the past 10 years? Have any interim precautionary measures been taken (warning stickers, safe zones, etc.).
 - A Lead paint removal actions are common, but becoming less frequent. Generally, these are associated with housing units. Certain facilities have had to be shut down for remediation and later reopened. Certain facilities have been shut down and not remediated/reopened.
- Q How are lead paint materials stored on-site? What records are available? What do these records contain?
 - A Removed paint is generally disposed off-site by contractor (approximately 90% of projects). It is up to them how and where to safely store the materials until disposal. Removal action reports are kept in hard copy only.

- **Q** What disposal facilities were used? What testing did they require?
 - **A** Not sure.
- Q Has NESHAP come into play (e.g., when buildings containing lead paint are torn down)?
 - **A** *Not applicable.*
- Q Is information managed or coordinated by any means? Would it be beneficial to use a GIS to manage this information?
 - A Managing lead survey and remediation information through a GIS would be much more preferable than the hap-hazard way lead paint information is "coordinated" now. This would allow each building or facility to be tracked from survey through removal action. Electronic flagging of remediated areas or zones would be useful (could break down buildings into rooms, if necessary).

Building Environmental Hazards - Indoor Air Quality

Contact: (To be identified.) **Date of Interview:** (*Telephone interview not yet conducted.*) Are indoor air quality surveys conducted for buildings at this facility? If yes, what types of Q contaminants are monitored (e.g., radon, CO, formaldehyde)? What were the results of past survey? What actions have or have not been taken? A Q Have any building been diagnosed with "Sick Building Syndrome"? For what reasons and what are the suspected causes? A Q Are there microbacterial and/or molds problems associated with duct work in any buildings? Explain. A O Is indoor air quality monitored in any of the facility buildings? Why? How? A Q Are complaint records relating to the "health" of the buildings kept? By whom? A Is duct work cleaned on any kind of regular or informal basis? Is this contracted work? Q A Q Is information managed or coordinated by any means? Would it be beneficial to use a GIS to manage this information? A

PCBs Management and Disposal

Contact:

Mr. Robert Hoffman

Cultural Resources Specialist MacDill - CEVC Ph: 1-(813)-828-2567 **Date of Interview:** Tuesday, July 1, 1997 General Q List and describe the types of on-site equipment that may contain PCBs: Transformers **Heat Transfer Systems** Capacitors (large, high, low) Air Compressors Hydraulic Systems Others (list) A MacDill is essentially PCB free. All sources have been remediated and disposed off-site. Bob maintains a database of PCB removal information (quantity, date, manifest numbers), but there is no need to actively updated it. It exists only in a DOS based FoxPro format and it is difficult to work with because it doesn't want to open in any of the current database software packages being utilized on site. The need for the information is rare, perhaps only when the base is required to undergo an environmental inspection. Q Is the equipment totally enclosed? If not have there been PCB related leaks and/or spills? A Yes, in the past there were PCB spills and leaks. No known PCB containing equipment exists on site anymore. Q Has the equipment been sampled for PCBs? When? Would it be beneficial to manage this type of information with a GIS? A Information could be transferred or re-input into a GIS, but not really useful for compliance purposes anymore. Q Is the equipment on site that once contained PCBs and is now rehabilitated/reclassified? Would it be beneficial to manage this type of information with a GIS? Not applicable. Not beneficial. A Q Are there equipment servicing reports/records kept? A *Not applicable.*

- Are all PCB equipment locations defined and tracked by any means? Are there PCB waste storage areas defined? Are these in compliance with applicable regulations (TSCA 6" curb, not in flood plain, volume of 2 x largest container or 25% total)?
 - **A** Information on locations of former PCB equipment could be decyphered from the PCB database. No PCB storage areas exist on-site anymore.
- **Q** Are PCB transformers properly registered with the local fire department?
 - A Not applicable.

Monitoring

- **Q** Does the facility require an annual inventory (use more than 99.4 lb of PCB)?
 - **A** *Not applicable.*
- Q Have PCB wastes been disposed off-site in the last 10 years? Which TSCA permitted facilities were used? Are manifests available and in what forms? Are Certificates of disposal available and in what forms? Would it be beneficial to manage this information in a GIS?
 - A Yes. Not sure on disposal locations, but probably listed on the database. Hard copy manifest records and disposal certificates/records may still be around, but not sure of location. Not really beneficial to do any additional management of PCB information at MacDill.
- Q Does the facility have an SPCC plan applicable to PCBs? Would it be beneficial to incorporate this type of information in a GIS?
 - **A** There is a facility-wide SPCC plan. Would not be relevant to PCBs anymore.

Reporting

- **Q** To what entities are PCB inventories reported to?
 - **A** *Not applicable.*
- **Q** To what entities are PCB waste disposal reports/records submitted?
 - **A** *Not applicable.*

Record Keeping

- What is the method of data management/record keeping (paper copies, electronic copies, both)? How long are records kept? How long are they required to be kept?
 - **A** *Not applicable.*

- **Q** What places are paper copies filed? Electronic copies kept? Do you believe that this is an effective management system for the intended purpose?
 - A PCB database kept electronically by Bob Hoffman. The location of any hard copy records uncertain at this time.
- **Q** What changes would you like to see implemented in the management of PCB related substances information? State systems applications and comment on changes.
 - A Perhaps conversion of the PCB database from the old DOS format to something more modern that can be read using the software packages that are currently used (say Microsoft Access for Windows). Not sure that a conversion could be done or if it would be cost-effective considering the limited need for the information.

Regulated Storage Tank Management

[Above Ground Storage Tanks (ASTs) and Underground Storage Tanks (USTs)]

Contac	et:	Mr. Richard Burnett Environmental Engineer - Tanks MacDill - CES Ph: 1-(813)-828-2567		
Date of Interview: July 1, 1997				
Data Management Systems				
Q	Does this facility maintain an electronic inventory of regulated ASTs tanks and/or USTs?			
	A	Yes. Basically this is a Microsoft Excel Spreadsheet that contains information on tank size and contents only. Also contains information on oil/water separators. MacDill is in the process of converting all USTs to double-walled ASTs.		
Q	What types of information is kept on these tanks? In what forms?			
		General Condition General Description As-Built Drawings Construction Materials/Lining Installation Date Tank Openings X Capacity Level Indication (real time) ASTM Ratings Maintenance Records Other (list)	Clearances (from other structures) Weather Protection/Heating/Cooling Spill Prevention Systems Overfill Prevention Systems Leak Detection Systems Vapor Recovery Systems Service Status Tightness Testing Historic Inspection Reports Elevation Drawings/Info	
Q		Is information managed or coordinated by any means? Would it be beneficial to use a GIS manage this information? A Does not feel GIS would be particularly useful to him in managing AST or US information. GIS would be most useful to him in locating associated utility lines an nearby stormwater drain lines, particularly for underground storage tanks.		
	A			
Q	Are records kept on materials stored in these tanks? Is there compatibility information kept on materials vs. tank construction? Do any tanks have multiple purposes (store more than one type of liquid over a given period)?			

reports or tank inspection records. No multiple use tanks.

Knows what each tank contains, but not necessarily the tanks material of construction. This is a design issue and that information can be obtained, if required, from installation

Compliance

- Q Is there a formal tank inspection schedule? What are the requirements (frequency, etc.)? Who conducts these?
 - A Tanks are required to be inspected by DEP. Supposed to be once per month, but actual frequency varies. Only keeps paper files of tank inspection records. These are standard agency forms.
- Q Is there a formal confined space entry program applicable to these tanks? Are records kept on permits issued? By who? What form?
 - **A** Yes. Probably managed through Wing Safety. Could be beneficial to manage confined space entry permitting and/or cutting/burning permits through a GIS.
- Q Is there a specific SPCC Plan and/or other plans/Manuals (e.g., O&M) that pertain to above ground storage tanks? Would it be beneficial to access these via a GIS?
 - A SPCC plan does exist and applies generally to MacDill. All above ground tanks have double wall containment, therefore, containment areas are not an issue. Feels it is easier to get hard copy of plans rather than use an electronic information system to access them.

Cultural Resources

Contact: Ms. Shelley Urbenik - CRS

Mr. Robert Hoffman - CRS

MacDill - CECV Ph: 1-(813)-828-2567

Date of Interview: Tuesday, July 1, 1997

Q What types of cultural resources are involved at the site?

A CEVC-(SU/BH): Historic buildings, endangered species (Bald Eagle, sea tortoise, etc.), wetlands, midden (oyster shell piles), native American lands, and ancient indian burial grounds.

- **Q** How are these resources managed?
 - A CEVC-(SU): Beginning to use GIS to manage some of these things. Have aerial photos of the base being produced for use in an ArcView GIS system. PathFinder Global Positioning System (GPS) equipment is about ready to start delineating certain areas. Will use ArcView GIS to access the information, but database intermediary type is unknown.
 - **A** CEVC-(BH): TSgt. Bryan Langhorne in CECP has been tasked with getting several aerial photos digitized. Also, has produced an endangered species map in ArcView form based on some old mapping.
- **Q** What kind of cultural resource information would you like to see managed through a GIS?
 - **A** CEVC-(SU): All of it. Would love to have a GIS person on base who could bring it all together. Needs to be able to be able to create constraint maps and land use maps for multiple purposes, such as denoting confliction of habitats and/or wetlands with Installation Restoration (IR) project site boundaries. Would like to be able to make wetlands restoration maps for IR projects.
- **Q** What is you level of training in computer software, particularly CAD/GIS?
 - **A** CEVC-(SU): Still a beginner on both CAD and GIS. Had recent training in ArcView at University of Florida. Not comfortable with Microsoft Access, but does maintain an inventory of bird species in a Microsoft excel spreadsheet.
 - **A** CEVC-(BH): Not familiar with ArcView. Was trained on Intergraph MGE about three years ago, but has never used that training. Familiar with Microsoft applications Excel and Access.

Hazardous Materials Storage, Tracking and Disposal

Contact: TSgt. St. Jean

MacDill - HazMART Pharmacy (HMP)

Ph: 1-(813)-828-2582

Date of Interview: July 2, 1997

Q Is this facility subject to SARA 312/313 reporting as required under OSHA 1910? Are past SARA reports kept and in what form(s)? Do you feel it would be beneficial to eventually link SARA reporting through a GIS hazardous materials management system? If so, would SARA reporting be on a chemical or product basis?

- A Yes primarily paper records are kept. SARA 312/313 reporting is now based in part on materials tracking through the HMP as well as other entities around MacDill. No petroleum products (e.g., jet fuel) come through the HMP (except for minor quantities of hydraulic fluid and oils) and there are ways to get potentially reportable materials on base without using the HMP (i.e., Impact Card). EMIS is useful for SARA reporting, but not a total answer. Would be nice if this could be coordinated, but SARA reporting is not done through the HMP. SARA reporting is run through Environmental (CEVC).
- Q Is there an active inventory of hazardous materials stored on site? Is this an electronic or paper information source? Is it regularly updated? How and how often?
 - A Rely primarily on the Environmental Management Information System (EMIS) for electronic tracking of HMP materials. Incoming materials are bar coded and scanned into EMIS (tracked by net fluid ounce). EMIS transfers accountability from HMP to customers upon distribution. This system has only been in place for a year, but they have worked most of the "bugs" out and it is running well. Information is updated every day and is always current. HMPs customers must submit a usage log (e-mail, fax, paper) to demonstrate that they have used all the material (HMP does not take cans back) before they can be issued more material. This helps track things "cradle to grave". Crystal Reports is used for generating various reports. EMIS is coordinated through the Center for Environmental Excellence (AFCEE) in San Antonio Texas.

EMIS also has a waste module, but it is not currently being used by CEVC. MacDill's BIO group uses EMIS to assign PPE for the various chemicals being used. No CADD or GIS is involved at HMP.

- **Q** What types of hazardous materials are stored on site? What types of storage facilities are provided for these materials?
 - A All kinds too extensive to list. Large quantities of various aircraft fuels as well as other supporting chemicals. Primarily stored at HMP or at customer "satellit% storage areas until used. USTs and ASTs on site for aircraft fuel storage.

- Q Are purchasing records maintained for chemicals brought to this facility by outside suppliers? How and where are these records kept? What information is provided (container size, content, hazard classifications, etc.) by the manufacturer(s)?
 - A There is a supply computer which keeps purchasing records. HMP does not use this information because it does not provide them with a "real time" picture. The purchasing system is known to interface with EMIS. Information regarding volumes, content, hazard classifications are all kept by HMP on EMIS once material is brought on site. EMIS does let you make mistakes (not too many checks), so it is only as good as the person inputting the data.
- Q Are materials consumption records kept? How and where? Are they regularly updated and by whom?
 - A Consumption records are basically the usage logs provided from HMP customers. Not sure how fuel consumption records are kept. These are relatively current because HMP will not issue customers more material without them documenting use of previously issued material. In some cases there are restrictions on how much material a customer can be issued, so they cannot hold a large inventory themselves for long periods of time.
- Q Are MSDS records maintained for hazardous materials generated/stored on site? Is this an electronic or paper information source? Is this regularly updated? How and how often? Do these records pertain strictly to chemicals used presently or do they also encompass chemicals that may not be used currently?
 - A MSDS information is available on CD ROM from HMIS. This is generally accessible via EMIS. Updated versions are issued quarterly. However, MacDill is currently using the January 1997 version, because EMIS is set up to read off two (2) CDs and the latest version came out on three (3) CDs. Trying to resolve this conflict, but MSDS information from January is still very good.
- Q Is there a specific SPCC Plan and/or other plans that pertain to the storage of hazardous materials? Would it be beneficial to access these via a GIS?
 - A There is a base-wide SPCC plan which applies to the facility. The HMP warehouse is designed with appropriate floor drain system and is supplied with several commercial spill kits. No real need to access via GIS better to have a hard copy that is mobile. Could incorporate it electronically for purpose of information sharing.

Hazardous Waste Storage, Tracking and Disposal

Contact: Mr. Mike Bowers

Environmental Engineer - Hazardous Waste

MacDill - CES

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Date of Interview: (*Telephone interview not yet conducted.*)

Hazardous Wastes

Q What types of processes generate hazardous wastes? What are the classifications of these wastes?

A

Q How are these wastes regulated (under what programs)?

 \mathbf{A}

Q How and where are hazardous wastes stored (satellite storage areas)? Are appropriate area warning placards placed near the storage areas? Are these locations monitored or secured by any means?

A

Q Are appropriate hazard/content labels applied to hazardous waste containers?

 \mathbf{A}

Q Are waste volumes and quantities tracked via paper trail or in database type system or both? What information is tracked?

A

Q Are these waste disposed on site or off site? Are manifest records kept for hazardous waste transport activities? What other DOT-type requirements must be complied with in shipping?

 \mathbf{A}

Q Are certificates of disposal issued by the receiving facility? What information is contained on these certificates?

A

Q What kind of hazardous waste information should be managed through a GIS and what should not?